REMARKS

Claims 1-21 are pending in the application. Claims 3 and 10-16 are withdrawn. Claims 1-2, 4-9, and 17-21 are under consideration. Claims 1, 5, 8, 9, 17, 19, and 20 have been amended. Claim 2 has been canceled. Support for the amendments to claim 1 may be found at least, e.g, on page 32, lines 4-12, in Examples 4 and 5, and in original claim 2. Support for the amendments to claims 5, 8, and 9 may be found at least, e.g, on page 18, lines 1-3 and on page 23, lines 1-2. Support for the amendments to claims 17, 19, and 20 may be found at least, e.g, in original claims 17, 19, and 20. No new matter has been added.

The specification has been amended to add the appropriate SEQ ID NOs and to provide a more descriptive title. No new matter has been added.

Amendment and/or cancellation of the claims should in no way be construed as acquiescence to any of the Examiner's rejections. The amendment and/or cancellation of the claims are being made solely to expedite prosecution of the present application and do not, and are not intended to, narrow the claims in any way. Applicants reserve the right to further prosecute the same or similar claims in the instant application, or in a divisional or continuation patent application.

Objection to the specification

The Examiner has objected to the specification for not complying with the requirements of 37 CFR §§ 1.821-1.825. More specifically, the Examiner objects to the specification because the sequences in Figure 1 are not accompanied by SEQ ID NOs. The specification has been amended to comply with 37 CFR §§ 1.821-1.825 to add the appropriate SEQ ID NOs. Applicants have reviewed the specification and believe that it is now compliant with 37 CFR §§ 1.821-1.825. Accordingly, reconsideration and withdrawal of this objection is respectfully requested.

The Examiner objects to the title of the application as allegedly being not descriptive. The title has been amended to "Use of B7-H3 to Inhibit Lymphocyte Proliferation." Applicants believe that the amendment obviates this objection. Accordingly, reconsideration and withdrawal of the objection is respectfully requested.

Objection to the claims

The Examiner has objected to claims 17-21 as being dependent on a non-elected claim. Claims 17 and 19 have been amended to no longer depend from withdrawn claim 13. Accordingly, reconsideration and withdrawal of this objection is respectfully requested.

Rejection of claims 1-2, 4-9, and 17-21 under 35 U.S.C. § 112, second paragraph

Claims 1-2, 4-9, and 17-21 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for the recitation of "B7-H3 agonist." More specifically the Examiner states:

> [I]t is unclear whether the recitation refers to a substance that acts on B7-H3 to activate it, or a substance that mimics the activating action of B7-H3 on its receptor.

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claim 1 has been amended to recite that the lymphocyte is contacted with a *soluble form of B7-H3*. Applicants believe that the amendment obviates the rejection. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Rejection of claims 1-2, 4-9, and 17-21 under 35 U.S.C. § 112, first paragraph

Claims 1-2, 4-9, and 17-21 stand rejected under 35 U.S.C. § 112, second paragraph for allegedly lacking enablement. More specifically the Examiner states:

> A. The specification does not provide a sufficient enabling description of a method of inhibiting activation of lymphocytes by contacting the lymphocytes with a "soluble" form of B7-H3. The instant specification discloses in Examples 4 and 5 that B7-H3 can inhibit activation of lymphocytes when present together with HLA-DR2 on the surface of a cell, or together with anti-CD3 antibody on the surface of a microbead . . . Based on this disclosure, one of skill in the art would reasonably conclude that "soluble" B7-H3 . . . would not be able to inhibit activation of lymphocytes.

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claim 1 has been amended to recite that the method comprises contacting an *activated* lymphocyte with a soluble form of B7-H3. Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Further in support of this rejection, the Examiner states:

> B. The specification does not provide a sufficient enabling description of a method of inhibiting activation of lymphocytes by contacting the lymphocytes with a generically recited B7-H3 "agonist . . ." [A] person of skill in the art is not enabled to make and use any "agonist" of B7-H3 commensurate with the scope of the claims as presently recited . . . .

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claim 1 has been amended to recite that the method comprises contacting an activated lymphocyte with a *soluble form of B7-H3*. Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Further in support of this rejection, the Examiner states:

> C. The specification does not provide a sufficient enabling description of a method of inhibiting activation of lymphocytes in a mammal which is afflicted with cancer or an infectious disease. One of skill in the art is aware that inhibiting activation of lymphocytes in a cancer or an infectious disease patient would lead to inhibition of the immune response to cancer cells or the infectious agent, respectively, and therefore would exacerbate rather than improve the patient condition.

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claim 20 has been amended to recite, "wherein the mammal is afflicted or is at risk for an immunologic disorder." Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Further in support of this rejection, the Examiner states:

> D. [T]he specification does not provide a sufficient enabling description how to make and use a polypeptide comprising an amino acid sequence which is

> "substantially identical" to the recited sequence, wherein the polypeptide is functional in the claimed methods. . . [T]he claims encompass in their breadth a genus of sequences comprising a vast number of diverse variants . . . .

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claims 5, 8, 9 has been amended to recite that the amino acid sequence is *at least 90%* identical to a recited sequence *and which competitively inhibits binding of B7-H3 to its receptor*. Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 1-2, 4-9, and 17-21 under 35 U.S.C. § 112, first paragraph

Claims 1-2, 4-9, and 17-21 stand rejected under 35 U.S.C. § 112, second paragraph for allegedly lacking written description. More specifically the Examiner states:

> A. Applicant is not in possession of the claimed method, because Applicant is not in possession of a generically recited B7-H3 "agonist . . . ." Applicant has not provided a disclosure of sufficiently detailed, relevant identifying characteristics . . . to describe the recited genus.

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claim 1 has been amended to recite that the method comprises contacting an activated lymphocyte with a *soluble form of B7-H3*. Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Further in support of this rejection, the Examiner states:

> B. Applicant is not in possession of the claimed method, because Applicant is not in possession of a polypeptide comprising an amino acid sequence which is "substantially identical" to the recited sequence, wherein the polypeptide is functional in the claimed methods. . . [T]he claims encompass in their breadth a genus of sequences comprising a vast number of diverse variants . . . .

Applicants respectfully traverse this rejection. However, in light of Applicants' amendments to the claims, the rejection is considered moot. More specifically, claims 5, 8, 9 has been amended to recite that the amino acid sequence is *at least 90%* identical to a recited sequence *and which*

competitively inhibits binding of B7-H3 to its receptor. Applicants believe that the amendment obviates this rejection. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Rejection of claims 1-2, 4-9, and 17-21 under 35 U.S.C. § 102

Claims 1-2, 4-9, and 17-21 stand rejected under 35 U.S.C. § 112, second paragraph for allegedly being anticipated by Mikesell et al (U.S. Pat. Pub. No. 2002/0095024. More specifically the Examiner states:

> Mikesell et al. teach and claim a method for decreasing (inhibiting) lymphocyte activity in a subject, comprising administering to the subject a polypeptide comprising amino acid sequence of SEQ ID NO: 7 or SEQ ID NO: 13 (e.g., claim 28). The instantly recited SEQ ID NO: 22 is identical to amino acids 246-357 of SEQ ID NO: 7 . . . taught by Mikesell et al., while instantly recited SEQ ID NO: 14 is identical to amino acids 28-139 of SEQ ID NO: 13 taught by Mikesell et al., as shown in the attached alignments.

Applicants respectfully traverse this rejection. With respect to the sequences referenced by the Examiner, Mikesell et al. discloses that modulation of B7-related factor function may be useful in the induction of tumor immunity (See paragraph 0195). For example, Mikesell et al. teach that tumor cells (e.g., sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, or carcinoma cells) can be genetically engineered to carry a nucleic acid encoding at least a fragment of at least one B7-related factor, such as the sequences referenced by the Examiner (SEQ ID NO: 7 or 13), and then administered to a subject to traverse tumor-specific tolerance in the subject (See paragraph 0195). Thus, Mikesell et al. does not teach that the sequences referenced by the Examiner (SEQ ID NO: 7 or 13) are useful in *inhibiting proliferation* of a lymphocyte, as recited in Applicants' claims. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

CONCLUSION

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617)832-1000.

The Director is hereby authorized to charge any deficiency that should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Deposit Account No. 06-1448**, under Ref. No. **WYS-005.01**.

Respectfully submitted,

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